I CLAIM:

1. A machine for fastening a compression ring on an object to be fastened by shrinking the ring, comprising housing means having a center, segmental slide members within said housing means and operable to move within said housing means along substantially circular paths about said center, segment means located on the inside of said slide members and having internal surfaces for engagement with a compression ring, said segment means being operable to move in the radial direction in response to actuation by said slide members to engage with ~~the~~ an outer surface of a compression ring, said slide members being provided with internal surface portions of non-constant radial distance from said center and said segment means being provided with external surface portions for engagement with said non-concentric surface portions, and actuating means operatively connected with said slide members for actuating said slide members in mutually opposite circumferential directions thereby to apply inwardly directed forces on said segment means when actuated in one direction and release said forces when actuated in the opposite direction.

2. A machine according to claim 1, further comprising means for limiting sliding movement of the slide members along said substantially circular paths.

3. A machine according to claim 2, wherein said limiting means includes substantially circularly shaped external surfaces on said slide members and wall means in said housing means of substantially circular shape which define the substantially circular paths along which said slide members can move.

4. A machine according to claim 2, wherein said limiting means includes elongated openings in each slide member disposed on a circular arc of substantially constant radius and roller members rotatably fixed in the housing means and of a diametric dimension operable to engage in said openings.

5. A machine according to claim 1, wherein said slide members and said segment means are provided with internal and external surfaces, respectively, operatively but ~~non-positively~~ not positively connecting said slide members with the segment means.

6. A machine according to claim 5, wherein the internal surfaces of said slide members and the external surfaces of said segment means have portions of substantially complementary shape non-concentric with respect to the center of the machine.

7. A machine according to claim 5, further comprising means for retracting the segment means during opening movement of the slide members when the internal surfaces of the latter increase in radial distance from the center of the machine.

8. A machine according to claim 1, wherein said actuating means includes slide carriage means operable to be moved to and fro, said slide members being provided with outwardly extending arm portions, and connecting means operatively connecting said arm portions with said slide carriage means to transform the to-and-fro movements of said slide carriage means into closing and opening movements of said slide members.

9. A machine according to claim 8, wherein said connecting means include roller means on said arm portions operable to engage in guide means in said slide carriage means.

10. A machine according to claim 1, wherein said actuating means includes two pivot plate means one each operatively connected with a respective one of said slide members, pivot pin means pivotal in said pivot plate means, and a spindle having oppositely directed threaded portions operable to engage with threaded bores in said pivot pin means to cause said slide members to move in mutually opposite directions upon rotation of said spindle means.

11. A machine according to claim 10, further comprising means for holding the spindle against axial movement but enable rotation thereof.

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13 ~~12.~~ A machine according to claim 1, wherein said housing means is made of two parts pivotally connected with each other to enable opening thereof.

12 ~~13.~~ A machine according to claim 10, further comprising means for holding said spindle against axial movement but permit rotation thereof, and wherein said slide members each include a substantially radial arm portion, wherein two pivot plate means are provided for each arm portion which are connected to the top and bottom of each arm portion, the pivot plate means forming bearing surfaces for a respective pivot pin means, and said pivot pin means being provided with internal threaded bores of a thread complementary to the threaded portions of the spindle.

20 ~~14.~~ A machine for fastening a compression ring on an object to be fastened by shrinking the ring, comprising housing means, segmental slide members within said housing means, means for limiting sliding movement of said slide members within said housing means along circular paths with a constant radius about a center, segment means on the inside of said slide members and operable to move in ~~the~~ a radial direction, said slide members being provided with internal surface portions of non-constant radial distance from said center and said segment means being provided with surface portions for engagement with said internal surface portions of the slide members, and means operatively connected with said slide members including pivot plate means and pivot pin means pivotal in

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said pivot plate means for actuating said slide members in opposite circumferential directions.

21 ~~15.~~ A machine according to claim 20 ~~14,~~ wherein said means limiting sliding movement of the segmental slide members along circular paths includes elongated openings in each slide member disposed on a circular arc of substantially constant radius and roller members rotatably fixed in the housing means and of a diametric dimension operable to engage in said openings.

14 ~~16.~~ A machine according to claim 13 ~~12,~~ wherein said segmental slide members and said segment means are provided with internal and external surfaces, respectively, operatively but not positively ~~non positively~~ connecting the segment means with said slide members.

15 ~~17.~~ A machine according to claim 14 ~~16,~~ wherein the internal surfaces of said slide members and the external surfaces of said segment means have portions of substantially complementary shape non-concentric with respect to the center of the machine.

16 ~~18.~~ A machine according to claim 15 ~~17,~~ further comprising spring means for retracting the segment means during opening movement of the slide members when the internal surfaces of the latter increase in radial distance from the center of the machine.

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22 ~~19.~~ A machine for fastening a compression ring on an object to be fastened by shrinking the ring, comprising housing means having a center, segmental slide members within said housing means and operable to move within said housing means along substantially circular paths, segment means on the inside of said slide members and operable to move in ~~the~~ a radial direction, said slide members being provided with internal surface portions of non-constant radial distance from a center, said segment means being provided with external surface portions for engagement with said non-concentric surface portions, and actuating means operatively connected with said slide members for actuating said slide members in opposite circumferential directions including a slide carriage means whose to-and-fro movements are converted into sliding movements of the slide members along the circular paths in opposite directions, respectively.

23 ~~20.~~ A machine according to claim 22 ~~19,~~ further comprising means for limiting the to-and-fro movements of said carriage means to rectilinear movements.

24 ~~21.~~ A machine according to claim 23 ~~20,~~ wherein said limiting means includes a spline connection between said carriage means and a relatively fixed part along which said slide carriage means moves.

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25 ~~22.~~ A machine according to claim ~~21,~~ 24 further comprising complementary means in said housing means and on said segment means for limiting movement of said segment means in a substantially radial direction.

26 ~~23.~~ A machine according to claim ~~22,~~ 25 wherein said complementary means include substantially radially extending channels in one of said housing means and said segment means and projections on the other of said housing means and said segment means of a shape complementary to said channels.

27 ~~24.~~ A machine according to claim ~~23,~~ 26 further comprising spring means in said complementary means to retract said segment means in a radially outward direction during opening movement of slide members.

17 ~~25.~~ A machine according to claim 1, further comprising complementary means in said housing means and on said segment means for limiting movement of said segment means in a substantially radial direction.

18 ~~26.~~ A machine according to claim ~~25,~~ 17 wherein said complementary means include substantially radially extending channels in one of said housing means and said segment means and projections on the other of said housing means and said segment means of a shape complementary to said channels.

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19 ~~27.~~ A machine according to claim 18 ~~26,~~ further comprising spring means in said complementary means to retract said segment means in a radially outward direction during opening movement of slide members.